Middle Fork Fire Salvage Timber Sale

Final Decision and Decision Rationale

Environmental Assessment Number OR080-07-06

May 2007

United States Department of the Interior
Bureau of Land Management
Oregon State Office
Salem District, Cascades Resource Area

Township 12 South, Range 3 East, Sections 15, 21, 27, and 28
Willamette Meridian
Quartzville Creek 5th field Watershed.
Linn County, Oregon

Responsible Agency:	USDI - Bureau of Land Management
Responsible Official:	Cindy Enstrom, Field Manager Cascades Resource Area 1717 Fabry Road SE Salem, OR 97306 (503) 375-5969
For further information, contact:	Randy Herrin Cascades Resource Area 1717 Fabry Road SE Salem, OR 97306 (503) 315-5924

BLM Salem District

As the Nation's principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

Table of Contents

BLM/OR/WA/PL-06/004+1792

I. Introduction

Bureau of Land Management (BLM) has conducted an environmental analysis for the Middle Fork Fire Salvage project, which is documented in the *Middle Fork Fire Salvage Timber Sale Environmental Assessment* (EA, # OR080-07-06) and the associated project file. The Proposed Action of the Middle Fork Fire Salvage project is to salvage dead and dying trees from 34 acres within the Matrix Land Use Allocation (LUA) that resulted from the Middle Fork Fire, August, 2006. The Middle Fork Fire burned approximately 1000 acres of which approximately 300 were on BLM land. A Finding of No Significant Impact (FONSI) was signed on March 13, 2007 and the EA and FONSI were then made available for public review.

II. Decision

I have decided to implement the Proposed Action of the Middle Fork Fire Salvage Project as described in the EA (EA pp. 5-11). This decision is based on site-specific analysis in the Middle Fork Fire Salvage Environmental Assessment (EA # OR080-07-06), the supporting project record, public comment, and management recommendations contained in the Quartzville Creek Watershed Analysis; as well as the management direction contained in the Salem District Resource Management Plan (May 1995), which are incorporated by reference in the EA. This Decision is summarized in this section of the Decision Rationale (DR) and is hereafter referred to as the "selected action".

Silvicultural Treatments

- Salvage of dead and dying trees on approximately 34 acres within the General Forest Management Area (GFMA) and Connectivity portions of the Matrix Land Use Allocation. The selected action is to cut and remove merchantable dead and dying trees burned in the Middle Fork fire. For this proposal, dead and dying trees are generally those where more than fifty percent of the cambium has been killed and/or where a high proportion of the crown is scorched and buds are killed. Dead and dying trees to be harvested are further defined by the following criteria.
  - Trees where the live crown ratio is less than twenty percent,
  - Hemlocks where the exposed roots are black from the fire,
  - Hemlocks and hardwoods where the fire has scorched the entire circumference of the bole,
  - Trees with signs of high fire intensity at the base of the tree – evidence of intense heat for a long period of time, and
  - Thickness of the bark - Thinned bark trees have a high likelihood of mortality (90+ %), thick barked trees may survive. (Silv Report p. 5, 9)

Units proposed for salvage harvest are shown in *Table 1: Treatment Table*.

Table 1: Treatment Table

T-R-Sec-Treatment Area	Acres	Land Allocation	Treatment[1]	Tractor (acres)	Skyline (acres)	Harvest Volume (mbf)	Tree Plant (acres)
12-3-15 Unit A1	23	Matrix GFMA	Regen salvage harvest,	0	23	805	23

Table 1: Treatment Table							
T-R-Sec-Treatment Area	**Acres**	**Land Allocation**	**Treatment[1]**	**Tractor (acres)**	**Skyline (acres)**	**Harvest Volume (mbf)**	**Tree Plant (acres)**
			tree plant				
12-3-15 Unit A2	5	Matrix GFMA	Partial Cut salvage harvest	5	0	50	
12-3-15 Unit A3	2	Matrix GFMA	Partial Cut salvage harvest	2	0	20	
12-3-27 Unit C	3	Matrix Connectivity	Patch Cut salvage harvest	3	0	105	3
12-3-27 Unit D	1	Matrix Connectivity	Patch Cut salvage harvest	1	0	35	1
TOTAL	**34**			**11**	**23**	**1,015**	**27**

[1] The Treatments are described in the EA, p. 6.

No salvage harvest would occur in riparian reserves. Trees expected to survive more than three years post-fire would not be harvested, unless they're located in skyline corridors (EA p. 5)

- Reforestation: planting, would take place on approximately 27 acres.

Logging Systems

- Approximately 11 acres will be harvested using ground-based yarding and approximately 23 acres will be harvested using skyline yarding (See Table 1, above).

Road Work and Haul:

- 0.2 mile of temporary road would be constructed to accommodate logging equipment and log transport. Following logging, the temporary roads would be closed, scarified and revegetated.
- 0.6 mile of closed existing road would be temporarily opened then closed following salvage operations.

Fuel Treatments

- Activity generated fuels will be treated on approximately 34 acres and an additional 40 acres will be treated outside the proposed areas to be salvaged. Approximately 7 acres will be machine piled, 26 acres will be handpiled and burned, and 40 acres will be mechanically masticated. Some hand piled material will be lopped and scattered perpendicular to the slope within skyline corridors or steep slopes.

Design Features

The Project Design Features described in *EA section 2.3* will be implemented. The following list summarizes the Project Design Features.

1. Reserve Trees: All un-merchantable dead, down and dying trees, all old growth trees (EA p. 8). In addition, Douglas-firs with twenty percent or greater live crown ratio would be reserved from harvest unless they meet one of the criteria for harvest described in *DR section I – Silvicultural Treatments* (DR p.3).

2. Logging Systems: Logs would be suspended at one end, and skidded only on approved trails. Tractors would be restricted to slopes less than 36%. Skid roads would be water barred after use and blocked where they intersect haul roads. Where possible, skyline yarding corridors would be placed to avoid channeling of water. Corridor location would avoid surviving green trees and leave snags to the extent possible. Woody debris may be hand placed on corridors to reduce surface erosion. All landings, including fill slopes, would be located away from headwalls and draw bottoms and adjacent draw side slopes. See Table 2.

3. Road Construction, Decommissioning and Use: Waterbars would be constructed to minimize surface runoff and potential erosion. All new road construction will be decommissioned following salvage operations. All newly disturbed areas associated with road and landing construction would be seeded with native species seed. See Table 2.

4. ***Table 2:*** Seasonal Operating Restrictions

Location	Restricted Activities	Restricted Dates	Reasons / Comments
Entire project area	Road Construction, Yarding, log hauling and machine piling.	Nov. 1-May 1	Erosion control. (Dates may vary depending on weather, road surface, drainage, and soil moisture.)
Partial Cut Areas	Falling and Yarding	March 1 – July 15	Bark Slippage (may be waived if damage to residual trees mitigated)
Unit A1, A2, A3	All activities.	February 1 – July 31	Falcon nesting. (may be waived depending on results of occupancy surveys.)

5. Riparian Reserves: Riparian areas would be buffered with 400' no-harvest zones (200' each side). Existing roads, skid trails and tractor fire trails within Riparian Reserves may be used for harvesting fire killed and dying trees that are outside of Riparian Reserves. Following harvest, these trails would be rehabilitated.

6. Noxious Weeds: Approved native seed would be used where seeding takes place for noxious weed abatement or erosion control. Ground disturbing equipment would be cleaned prior to moving onto BLM lands or when moving from known noxious weed areas into weed-free areas.

7. Wildlife: Existing large down wood (≥ 20") would be retained to the greatest extent possible. Within or adjacent to regeneration or patch cut units, an average of 8 snags, and/or green trees, per acre greater than 16" dbh would be retained. Trees selected for leave would generally be in the larger size classes, and would be those which are the most likely to survive falling and yarding operations. All existing old growth remnant trees would be left. See *EA section 2.3.1* - Reserve Trees, *DR Table 2*, above, and *DR section VI*.

8. Cultural Resources: If any cultural sites are found during project implementation, sites would be buffered against project activities and trees would be felled away from buffers.

III. Alternatives Considered

The Proposed Action and action alternatives were described in *EA section 2.0*. The following alternatives were considered and not selected, or considered but not developed.

1. No Action (*EA section 2.1*): No dead or dying timber would be salvaged. I did not select this alternative because it did not meet the purpose of and need for action *(EA section 1.2)* and does meet RMP direction concerning dead and damaged timber (RMP p. 46).

2. Harvest All Areas with Fire Caused Tree Mortality *(EA section 2.4.1)*: I chose not to develop this alternative because there were areas unsuitable for treatment due to steepness of slopes and there were areas where low fire intensity resulted in little to no mortality.

3. Helicopter Yarding *(EA section 2.4.2)*: I considered helicopter yarding in lieu of road construction. I chose not to develop this alternative because there was not sufficient salvage volume to support helicopter yarding and a substantial portion of the volume suitable for helicopter yarding was on unsuitable slopes.

4. Salvage within Riparian Reserves *(EA section 2.4.3)*: I considered salvaging in the riparian reserve area. I chose not to develop this as an alternative because the riparian area severely impacted by the fire was small and in areas of poor slope stability. Salvaging this limited volume was not necessary to meet ACS objectives or initiate restoration actions.

Table 3 shows how the Selected Action meets the purpose and need of the project as compared to the No Action alternative.

Table 3: Comparison of the Alternatives with Regard to the Purpose of and Need for Action

Purpose and Need (EA Section 1.2)	***No Action***	***Selected Action*** *(Proposed Action)*
Provide for salvage of killed or damaged timber (RMP p. 46)	**Does not fulfill.** Salvages no killed or damaged timber.	**Fulfills,** salvages 34 acres of fire killed and damaged timber.
Recover some economic value from burned timber.	**Does not fulfill.**	**Fulfills.** Recovers a portion of fire damaged timber that would generate a positive return.
Expedite stand recovery.	**Partially fulfills.** Stands will be allowed to recover naturally with no additional impacts.	**Fulfills.** Severely burned areas would recover more quickly than the No Action alternative because they will be reforested and will receive less damage in the future when the remaining dead trees begin to fall.
Provide sufficient standing and down wood for habitat needs and protection of soil and water.	**Fulfills.**	**Fulfills.** Retains all standing dead and down material on 266 acres and retains standing dead and down wood on 34 acres at levels meeting or exceeding RMP standards[1].

[1] Exceeding = levels greater than what is prescribed by RMP standards and guidelines.

IV. Decision Rationale

Considering public comment, the content of the EA and supporting project record, the management recommendations contained in the Quartzville Creek Watershed Analysis, and the management direction contained in the RMP, I have decided to implement the selected action as described in section II of this Decision Rationale.

The following is my rationale for this decision.

Decision Criteria/Project Objectives (*EA section 1.2.1*): The Selected Action:

- Meets the purpose and need of the project *(EA section 1.2*), as shown in *DR Table 3*.
- Complies with the *Salem District Record of Decision and Resource Management Plan*, May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (*EA section 1.3*), (*DR section V*).
- Would not have significant impact on the affected elements of the environment beyond those already anticipated and addressed in the RMP EIS (EA FONSI pp. vii-x*)*.
- Harvests fire-killed merchantable timber and dying trees (*EA section 2.2.1*), in a timely manner
- Is responsive to concerns for an economically efficient project.
- Accelerates forest regeneration and promotes stand diversity.
- Ensures adequate amounts of snags and down wood for habitat diversity
- Uses the minimum transportation system to facilitate implementation of the project by using existing roads and limiting new construction to 0.2 miles of temporary road.
- Minimizes erosion and impacts to soil productivity
- Reduces fuel hazard
- Minimizes the potential for increases in population size for the area's existing invasive/nonnative species and would not contribute to the expansion of invasive/nonnative weed populations.

In addition, the Selected Action:

- Maintains a full range of options for future management actions in the area.
- Addresses concerns regarding the potential for insect outbreaks that could affect neighboring private land.
- Maintains or improves current Riparian Reserve conditions (DR pp. 8-10).

V. Compliance with Direction

The analysis documented in the Middle Fork Fire Salvage EA is site-specific and supplements analyses found in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS). This project has been designed to conform to the *Salem District Record of Decision and Resource Management Plan***,** May 1995 (RMP) and related documents which direct and provide the legal framework for management of BLM lands within the Salem District (EA pp. 2-4). All of these documents may be reviewed at the Cascade Resource Area office.

Compliance with the Aquatic Conservation Strategy

On March 30, 2007, the District Court, Western District of Washington, ruled adverse to the US Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA-Fisheries) and USFS and BLM (Agencies) in *Pacific Coast Fed. of Fishermen's Assn. et al v. Natl. Marine Fisheries Service, et al and American Forest Resource Council,* Civ. No. 04-1299RSM (W.D. Wash)((PCFFA IV). Based on violations of the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA), the Court set aside:

- the USFWS Biological Opinion (March 18, 2004),
- the NOAA-Fisheries Biological Opinion for the ACS Amendment (March 19, 2004),

- the ACS Amendment Final Supplemental Environmental Impact Statement (FSEIS) (October 2003), and
- the ACS Amendment adopted by the Record of Decision dated March 22, 2004.

Previously, in *Pacific Coast Fed. Of Fishermen's Assn. v. Natl. Marine Fisheries Service*, 265 F.3d 1028 (9th Cir. 2001)*(PCFFA II)*, the United States Court of Appeals for the Ninth Circuit ruled that because the evaluation of a project's consistency with the long-term, watershed level ACS objectives could overlook short-term, site-scale effects that could have serious consequences to a listed species, these short-term, site-scale effects must be considered. The following paragraphs show how the Middle Fork Fire Salvage project meets the Aquatic Conservation Strategy in the context of PCFFA IV and PCFFA II.

Existing Watershed Condition (EA p. 15)

The Middle Fork Fire Salvage project area is in the 95,468-acre Quartzville 5th field watershed which drains into the Middle Santiam River. Thirty-two percent of the watershed is managed by BLM, 28% is private, 36% is Forest Service, 4% is U. S. Army Corps of Engineers, and 14 acres (less than 1%) are managed by the state of Oregon. The Quartzville Watershed Analysis (2002) describes the events that contributed to the current condition such as early hunting/gathering by aboriginal inhabitants, mining, road building, agriculture and water diversions, wildfire, and timber harvest.

Late seral (≥ 80 years old) forests comprise 60 percent of the federal ownership in the watershed. We can infer then, that commercial harvest or stand replacement fire has occurred on 40% of the Federal lands in the watershed since 1926. The earliest harvests have been regenerated and are progressing towards providing mature forest structure. Most of the private industrial lands have been and will continue to be moved from mid condition class to the early condition class.

The majority of the private lands within the fire perimeter have been salvage logged or are in the process of being salvaged as of the date of the EA. Alternative 2 proposes salvage logging on 34 BLM acres (3% of the fire area and less than 0.04% of the total watershed). Foreseeable harvest on BLM land consists of the South M&M timber sale, 211 acres. Private industrial landowners are expected to continue with a similar harvest rotation as has occurred in the watershed since the 1940s.

Current riparian vegetation on federal lands in all of the Sub Watershed Basins (SWBs) is composed of greater than 50 percent mature timber (>80 years), while riparian vegetation on private lands in all of the SWBs is composed of less than 25 percent mature timber. The SWBs with the highest proportions of federal land (Lone Star and Upper Quartzville) have the highest percentages of late seral timber within riparian areas, while the SWB with the lowest proportion of federal land (South Green Peter) has the lowest. (Quartzville Watershed Analysis (WA) p. S-17).

A dominant hydrological feature in this watershed is the Green Peter Reservoir, which has blocked anadromous fish passage to historic upstream spawning and rearing areas. As a result of the Foster and Green Peter dams, anadromous fish are no longer present in Quartzville Creek (WA Ch 4 p. 12).

Review of Aquatic Conservation Strategy Compliance:

I have reviewed this analysis and have determined that the project complies with the ACS on the project (site) scale. The following is an update of how this project complies with the four components of the Aquatic Conservation Strategy, originally documented in the EA, Table 6a, p. 14. . The project would comply with ***Component 1 – Riparian Reserves:*** by maintaining canopy cover along all streams and the wetlands would protect stream bank stability and water temperature. Riparian Reserve boundaries would be established consistent with direction from the *Salem District Resource Management Plan*. No new road construction or timber salvage would occur within RMP Riparian Reserves; ***Component 2 – Key Watershed:*** by establishing that the Middle Fork Fire Salvage project is not within a Key watershed, ***Component 3 –Watershed Analysis:*** The Quartzville Watershed Analysis was completed in 2002. The following are watershed analysis findings that apply to or are components of this project:

- Timber harvest activities will include salvage operations conducted according to the NFP. (WA Ch. 7 pp. 16, 17)
- Improve and restore riparian habitat through planting and seeding with native vegetation. Activities could include planting, road decommissioning, and erosion control in Riparian Reserves, such as seeding or planting (WA Ch. 7 pp. 16, 17). This would apply to existing skid trails and fire trails within Riparian Reserves.

Component 4 – Watershed Restoration: by reducing the amount of fire killed timber in the project area, treating the residual fuels and planting seedlings would be expected to result in long-term restoration of a coniferous forest.

In addition I have reviewed this project against the ACS objectives at the project or site scale with the following results. The no action alternative does not retard or prevent the attainment of any of the nine ACS objectives because this alternative would maintain current conditions. The Selected Action does not retard or prevent the attainment of any of the nine ACS objectives for the following reasons.

ACS Objective (ACSO) 1 - Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted: Under the Selected Action, current habitat within Riparian Reserves would be maintained. No salvage harvest would occur within Riparian Reserves (EA p. 5). Streams would be buffered with 400' no-harvest zones (200' each side) (EA p. 9).

ACSO 2 – Maintain and restore spatial and temporal connectivity within and between watersheds: Under the Selected Action, current conditions spatial and temporal connectivity within and between watersheds would be maintained. Of the 277 acres burned in the Middle Fork Fire, 34 acres would be salvaged (EA p. 37). See ACSO 1 and ACSO 6.

ACSO 3 - Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations: Under the Selected Action, stream banks, wetlands and channel beds are protected from direct physical alteration or disturbance by harvesting equipment. Rehabilitation of the fire trail that was constructed to serve as a fire line and for access to the area would help restore the channel's physical characteristics (width, depth, gradient, etc.) at those locations where the trail has intersected stream channels and altered them.

The selected proposed action would be unlikely to result in any detectable effects, such as increases in bank erosion, channel incision, loss of floodplain connectivity or alteration of local wetland hydrology that could result from augmented peak flows or altered watershed hydrology (EA p. 22)

ACSO 4 - Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems: The selected action incorporates very little road construction (0.2 mile, none within Riparian Reserves) or decommissioning and no culvert repair or replacement. The retention of full Riparian Reserves on all streams will prevent any decrease in stream shade that could result in an increase in stream temperature.

Timber hauling on unpaved roads would be restricted to periods of dry road conditions. In addition, streams in the vicinity of the project area flow into Green Peter Reservoir where any potential effects of degraded water quality in the project area would be quickly diluted (EA p. 46).

ACSO 5 - Maintain and restore the sediment regime under which aquatic ecosystems evolved: Under the Selected Action, the risk of road related landslides in these locations is minimal. All new road construction would occur on low to moderate slopes with stable surfaces emanating from the existing road network and would not provide additional opportunities for road sediment from fill failures or ditch-line run-off to enter stream channels.

Maintenance and improvements of existing roads and construction of the stream crossing would likely result in increased turbidity during project implementation at stream/road intersections on perennial streams for one to two years, and then would return to pre-project levels. Increased turbidity is unlikely to be visible or measurable beyond 800 meters below the site of the disturbance (Foltz and Yanosek, 2005). During project work, turbidity in perennial streams would be visually monitored and be maintained within limits set by the Oregon DEQ. Any sediment yield increase would be difficult to measure and is unlikely to contribute more than a small fraction to the supply or transport of fine sediment in these watersheds.

Over the long term, road repairs would help reduce the risks to water quality and watershed hydrology that these roads currently pose by improving road drainage, fill stability and increasing the size of culverts to accommodate greater stream flow volume (EA p. 24-25). See ACSO 4.

ACSO 6 – Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing: The Selected Action would not remove any trees expected to live beyond three years and therefore has little potential to further affect stream flow. The selected action will not lead to any additional increase in annual water yield, base flow or peak flows in these watersheds because these effects are a result of the death of the fire killed trees and not their removal (EA p. 23). See ACSO 1.

ACSO 7 - Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands: Selected Action: Selected Action – See ACSO 1 and ACSO 3.

ACSO 8 – Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability: Selected Action – See ACSO 1.

ACSO 9 - Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species: Selected Action – See ACSO 1.

VI. Public Involvement/ Consultation/Coordination

Scoping:

This project first appeared in the September 2006 edition of the quarterly Salem District Project Update, which was mailed to over 1,000 addresses. During the public scoping process, approximately 35 letters were sent to interested groups and individuals as well as to those who own land or live near the project area. In response, two scoping letters were received. One writer urged the removal of all dead and dying trees, which was considered in an alternative described in *EA Section 2.4.1*. The other expressed concern over potential impacts due to salvage harvest and recommended letting the "fire-burned areas recover naturally", which was analyzed in the No Action Alternative, *EA Section 2.1* (EA p. 4).

Comment Period and Comments:

The Middle Fork Fire Salvage EA was made available for public review March 14, 2007 to March 30, 2007. A legal notice was placed in the *Albany Democrat Herald* newspaper on March 14, 2007, and posted on the Salem District's website. Three comment letters were received from organizations and individuals. Responses to these comments can be found in *DR section X*.

ESA Section 7 Consultation

1. U.S. Fish and Wildlife Service**:** A preliminary letter describing the magnitude of the fire and the scope of potential salvage plans was submitted to the Willamette Province Level I Team on October 26, 2006. On February 15, 2007, the draft Biological Assessment for the Middle Fork Fire Salvage Project was presented to the Willamette Province level I Consultation Team. U.S. Fish and Wildlife Service (USFWS) concurred with the preliminary effect determination that the proposed salvage may affect, but is not likely to adversely affect, the spotted owl and critical habitat. The final Biological Assessment for the proposed salvage was submitted for Informal Consultation with USFWS on March 6, 2007. A Letter of Concurrence (LOC) was received on April 20, 2007 (ref #13420-2007-I-0092). The Middle Fork Fire Salvage incorporates all of the applicable Management Standards set forth in the Letter of Concurrence (ref #13420-2007-I-0092) and Biological Opinion (ref #1-7-06-F-0170) received from USFWS for 2007/2008 habitat modification projects proposed in the Willamette Planning Province.

The LOC concluded that "no suitable habitat is affected by this project. The dispersal habitat affected by this project (7 acres) will continue to function and there is sufficient dispersal habitat available to support owl movement across the landscape. Although the project will salvage 33 acres of critical habitat, there is a general lack of functionality for the spotted owl on these acres due to the effects of the fire. No suitable habitat will be removed from the critical habitat. Project area surveys for spotted owls over the last 2 years have determined that the project area is unoccupied.

The closest known occupied sites are being avoided (LOC p. 9). The project area is outside the disruption distance of known spotted owl activity centers, therefore a seasonal restriction for disturbance is not required.

2. NOAA Fisheries (NMFS): The only listed fish species that may be present in the project watershed is Upper Willamette River (UWR) chinook salmon. Since 2004, the ODFW has been experimentally planting pre-smolt spring chinook salmon in Quartzville Creek and the Middle Santiam River. A determination has been made that the proposed action would have "no effect" on UWR chinook salmon. Therefore, consultation with NOAA Fisheries on the potential effects of the project on UWR chinook salmon would not be required.

   Potential effects of the salvage activities and connected actions on the listed fish species would be related to sediment inputs to streams associated with road construction/decommissioning, culvert replacement/removal, and timber hauling, as well as water temperature increases associated with removal of riparian vegetation. The selected action incorporates very little road construction (0.2 mile, none within Riparian Reserves) or decommissioning and no culvert repair or replacement. The retention of full Riparian Reserves on all streams will prevent any decrease in stream shade that could result in an increase in stream temperature. Timber hauling on unpaved roads would be restricted to periods of dry road conditions.

   In addition, streams in the vicinity of the project area flow into Green Peter Reservoir where any potential effects of degraded water quality in the project area would be quickly diluted. The determination of "no effect" is based on the factors stated above that would prevent increases in sediment inputs or temperature in Quartzville Creek, or increases in stream turbidity or temperature (*EA Sections 3.6.3 and 4.2.1*).

VII. Conclusion

Review of Finding of No Significant Impact

I have determined that change to the Finding of No Significant Impact (FONSI – March 13, 2007) for the Middle Fork Fire Salvage Timber Sale is not necessary because I've considered and concur with information in the EA and FONSI and this Decision Rationale. The comments on the EA were reviewed and no information was provided in the comments that lead me to believe the analysis, data or conclusions are in error or that the selected action needs to be altered.

The selected action would not have significant effects on the affected elements of the environment beyond those already anticipated and addressed in the *Salem District Proposed Resource Management Plan/Final Environmental Impact Statement*, September 1994 (RMP/FEIS) to which the *Middle Fork Fire Salvage Timber Sale Environmental Assessment* is tiered. Therefore Supplemental or additional information to the analysis in the RMP/FEIS in the form of a new environmental impact statement is not needed for the reasons described in the Finding of No Significant Impact (EA pp. vii-xi).

Administrative Review Opportunities

The decision described in this document is a forest management decision and is subject to protest by the public. In accordance with Forest Management Regulations at 43 CFR 5003, protests of this decision may be made within 15 days of the publication of a notice of decision in a newspaper of general circulation.

This notice of decision will be published in the *Albany Democrat Herald* newspaper on May 30, 2007. To protest this decision a person must submit a written protest to Cindy Enstrom, Cascade Field Manager, 1717 Fabry Rd SE, Salem, Oregon 97306 by the close of business (4:30 p.m.) on June 14, 2007. The planned sale date is June 27, 2007.

The protest must clearly and concisely state the reasons why the decision is believed to be in error. Any objection to the project design or my decision to go forward with this project must be filed at this time in accordance with the protest process outlined above. If a timely protest is received, this decision will be reconsidered in light of the statements of reasons for the protest and other pertinent information available and shall serve a decision in writing on the protesting party (43 CFR 5003.3).

Implementation

If no protest is received within 15 days after publication of this Decision Record (Middle Fork Fire Salvage DR) this decision will become final. For additional information, contact Randy Herrin (503) 315-5924 or Rudy Hefter (503) 315-5671, Cascades Resource Area, Salem BLM, 1717 Fabry Road SE, Salem, Oregon 97306.

Approved by: Cindy Enstrom Date 5/29/2007

Cindy Enstrom
Cascade Resource Area Field Manager

May 15, 2007

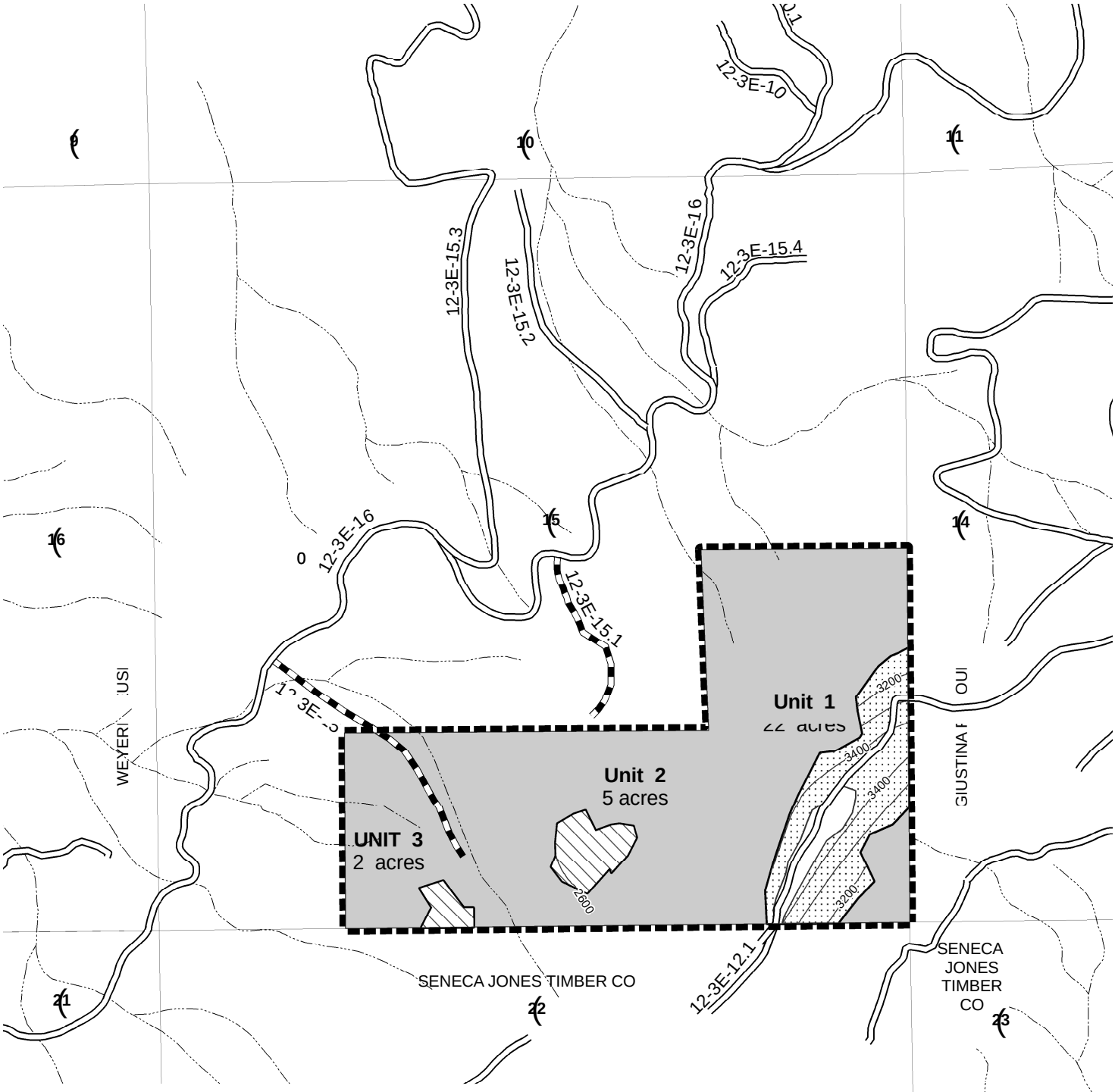
United States Department of Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon
TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS07-505
T. 12 S., R. 3 E., Section15, W.M. - Linn County - Oregon

Middle Fork Fire Salvage

EXHIBIT A

Tract No. 2007-505

Sheet 1 of 2



Legend

- Unit Area
- Unit Area - Partial Cut
- Unit Area - Skyline
- Road to be Improved
- Existing Road
- Streams
- Reserve Area
- Boundary - Cutting Area
- Boundary - Contract Area

Unit Area	26 acres
Unit Area - Partial Cut	7 acres
Reserve Area	207 acres
Total Contract Area	240 acres

1,000 500 0 1,000 Feet

Contour Interval = 100 Feet

Boundary of Unit Area is posted and painted orange. Boundary of Right-of-Way Area and Unit Area - Partial Cut are posted only. All lands within the Contract Area are O & C Lands. Acres shown on Exhibit A have been computed using a Trimble TSC1 Global positioning System receiver. Acerage was calculated based on GPS traverse procedures including differential correction.

May 15, 2007

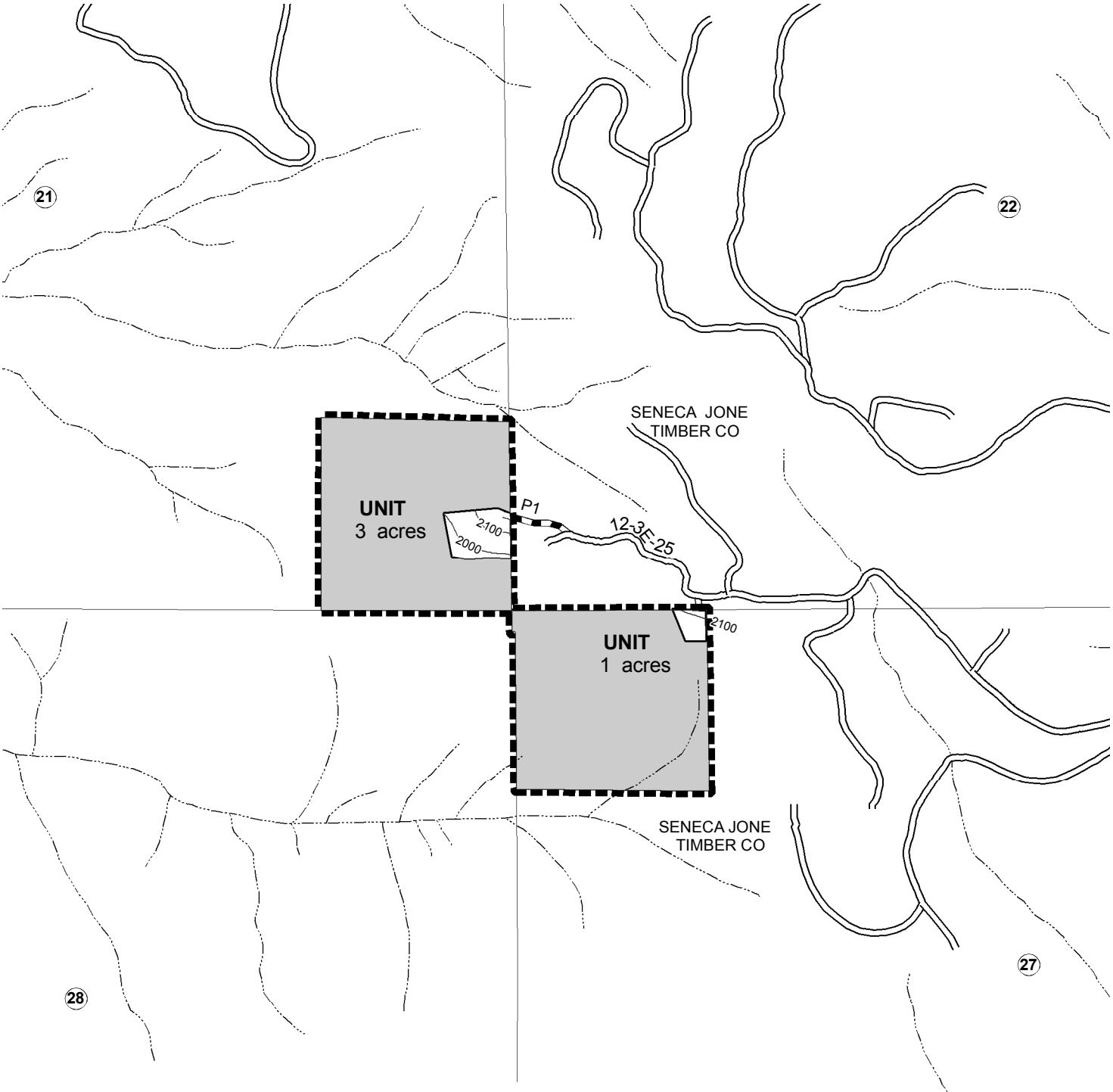
United States Department of Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon
TIMBER SALE CONTRACT MAP - CONTRACT NO. OR-080-TS07-505
T. 12 S., R. 3 E., Sections 21 and 27, W.M. - Linn County - Oregon

Middle Fork Fire Salvage

EXHIBIT A

Tract No. 2007-505

Sheet 2 of 2



Legend

- Unit Area
- Unit Area - Partial Cut
- Unit Area - Skyline
- Road to be Improved
- Existing Road
- Streams
- Reserve Area
- Boundary - Cutting Area
- Boundary - Contract Area

Unit Area	26 acre
Unit Area - Partial Cut	7 acre
Reserve Are	207 acre
Total Contract Area	240 acres

N

1,000 500 0 1,000 Feet

Contour Interval = 100 Feet

Boundary of Unit Area is posted and painted orange. Boundary of Right-of-Way Area and Unit Area - Partial Cut are posted only. All lands within the Contract Area are O & C Lands. Acres shown on Exhibit A have been computed using a Trimble TSC1 Global positioning System receiver. Acerage was calculated based on GPS traverse procedures including differential correction.

IX. Compliance with Survey and Manage Direction

2001 ROD Compliance Review: Survey & Manage Wildlife Species

Environmental Analysis File — Salem District BLM – Cascades Resource Area
Project Name: Middle Fork Fire Salvage — Prepared By: Jim England
Project Type: Salvage — Date: February 28, 2007
Location: T.12S, R.3E, Secs. 15, 21, 27 and 28, Willamette Meridian — List Date: December 19, 2003

Table A. Survey & Manage Wildlife Species. Species listed below include those vertebrate species whose known range includes the Salem District according to *Survey Protocols for Amphibians under the Survey & Manage Provision of the Northwest Forest Plan v3.0* (1999), *Survey Protocol for the Great Gray Owl within the Range of the Northwest Forest Plan v3.0* (Jan. 2004), *Survey Protocol for the Red Tree Vole v2.1* (Oct. 2002) and those mollusk species that are known or suspected within the District according to the *Survey Protocol for S&M Terrestrial Mollusk Species v3.0* (Feb. 2003).

Species	S&M Category	Survey Triggers			Survey Results			Site Management?
		Within Range Of The Species?	Project Contains Suitable Habitat?	Project May Negatively Affect Species/ Habitat?	Surveys Required?	Survey Date (Month/Year)	Sites Known Or Found?	
Vertebrates								
Larch Mountain Salamander [1] (*Plethodon larselli*)	A	N	N	NA	N	NA	NA	NA
Great Gray Owl [2] (*Strix nebulosa*)	A	Y	N	NA	N	NA	NA	NA
Oregon Red Tree Vole [3] (*Arborimus longicaudus*)	C	Y	N	NA	N	NA	NA	NA
Mollusks								
Puget Oregonian [4] (*Cryptomasix devia*)	A	N	N	NA	N	NA	NA	NA
Crater Lake Tightcoil [5] (*Pristiloma arcticum crateris*)	A	Y	N	NA	N	NA	NA	NA
Evening Fieldslug [6] (*Deroceras hesperium*)	B	Y	N	NA	N	NA	NA	NA
Columbia Duskysnail [7] (*Lyogyrus* n. sp. 1)	A	N	N	NA	N	NA	NA	NA
Basalt Juga [8] (*Juga* [*Oreobasis*] n. sp. 2)	A	N	N	NA	N	NA	NA	NA

NA = Not Applicable

[1] In the Salem District, the range of the Larch Mountain salamander is only in the very northern portion of the Cascades Resource Area, within 14 miles of the Columbia River, east of the confluence with the Sandy River according to *Survey Protocols for Amphibians under the Survey & Manage Provision of the Northwest Forest Plan v3.0* (1999) pages 262 and 269. The project area is not within this range.

[2] Pre-disturbance surveys for great gray owls are not required within the project area due to lack of suitable habitat. The required habitat characteristics of suitable habitat in Oregon Western Cascades Physiographic Province includes: (1) large diameter nest trees, (2) forest for roosting cover, and (3) proximity [within 200m] to openings that could be used as foraging areas (*Survey Protocol for the Great Gray Owl within the range of the Northwest Forest Plan v3.0*, January 12, 2004 pg 13). It is not necessary to survey suitable nesting habitat adjacent to natural openings smaller than 10 acres (page 5) and pre-disturbance surveys are not suggested in suitable nesting habitat adjacent to man-made openings at this time (pg. 14).

7 [3] In general, the red tree vole was removed from the Survey and Manage program in the mesic zone as a result of the 2003 Annual Species Review process. In the Salem District, pre-disturbance surveys for red tree voles are required to be conducted only in suitable habitat of the North Mesic Zone of their range, and the project area falls within this zone. There are no survey triggers for the Red Tree Vole (Version 2.1, Revision, October 2002) and thus no protection is required (*Management Recommendations for the Oregon Red Tree Vole*, Version 2.0, September 27, 2000). The described habitats are not present within the project area.

[4] In the Salem District, the range of *Cryptomastix devia* is limited to the Tillamook Resource Area, and Multnomah County in the Cascades Resource Area. The project area is not within this range.

[5] In the Salem District, *Pristiloma articum crateris* is suspected to occur above 2,000 feet elevation in the Cascades Resource Area only. This species is "limited to perennially wet situations in mature conifer forests, among rushes, mosses and other surface vegetation or under rocks and woody debris within 10 m of open water in wetlands, springs, seeps and riparian areas, generally in areas which remain under snow for long periods in the winter." Unless these specific habitats will be disturbed, no surveys are necessary. The described habitats are not present within the project area and will not be disturbed.

[6] In the Salem District, *Derocerus hesperium* has the potential to occur in all three resource areas however it is "limited to moist surface vegetation and cover objects within 30 m (98 ft.) of perennial wetlands, springs seeps and riparian areas." Unless these specific habitats will be disturbed, no surveys are necessary. Where habitat is present, equivalent-effort pre-disturbance surveys are required for this species. The described habitats are not present within the project area and will not be disturbed.

8 *Lyogyrus* n. sp. 1 is a Columbia Gorge endemic, found on both sides from east and south of Portland to Hood River, Oregon. Most sites are in Gorge tributaries; a few other sites occur in drainages originating from near Mount Hood, Oregon, to Mount St. Helens, Washington. In the Salem District, it is likely to be found only in the Cascades Resource Area, and only in cold, pure, well-oxygenated springs within a few miles of the Columbia River in Multnomah County. This project is not tributary to the Columbia Gorge. The described habitats are not present within the project area.

9 *Juga* n. sp. 1 is a Columbia Gorge endemic, and is found sporadically in springs in the central and eastern portions of the Columbia Gorge on the Oregon side only in Hood River and Wasco counties, Oregon, including sites in Mount Hood National Forest and sites in Columbia Gorge National Scenic Area. In the Salem District, it is likely to be found only in the Cascades Resource Area, and only in cold, pure, well-oxygenated springs within a

few miles of the Columbia River in Multnomah County. The project is not located in Multnomah County and is not tributary to the Columbia Gorge. The described habitats are not present within the project area.

Statement of Compliance. The **Middle Fork Fire Salvage** Project complies with the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004). There are no known Category B, C, D, E, and F species within the **Middle Fork Fire Salvage** project area.

Therefore, based on the preceding information (refer to Table A above) regarding the status of surveys and site management for Survey & Manage wildlife species, it is my determination that the **Middle Fork Fire Salvage** project complies with the provisions of the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004). For the foregoing reasons, this project is in compliance with the 2001 ROD as stated in Point (3) on page 14 of the January 9, 2006, Court order in Northwest Ecosystem Alliance et al. v. Rey et al. In addition, these types of projects fall under the exemptions specified in the October 11, 2006 modification of Northwest Ecosystem Alliance et al. v. Rey et al.

Signature: Cindy Enstrom **Date:** 5/29/2007

Cindy Enstrom, Cascades Resource Field Manager

2001 ROD Compliance Review: Survey & Manage Botany Species

Environmental Analysis File Salem District Bureau of Land Management – Cascade Resource Area

Project Name: Middle Fork Fire Salvage — Prepared By: Terry Fennell

Project Type: Salvage — Date: 03/07/2007

Location: T12S, R3E, Section 15, 21, 27 & 28; Linn County, Or. — S&M List Date: December 2003

Table A. Survey & Manage Species Known and Suspected in the Salem District. Species listed below were compiled from the 2003 Annual Species Review (IM-OR-2004-034) and includes all species in which pre-disturbance surveys may be needed (Category A, C and non-fungi Category B species if the project occurs in old-growth as defined on page 79-80 of the 2001 ROD) and lists known sites of other survey and manage species that are known to occur within the project area. In addition, the table indicates whether or not a survey was required, survey results and site management.

The following survey protocols and literature were used in determining species known range, habitat and survey methodology. All field surveys were conducted using the intuitive controlled method.

Fungi:

Survey Protocols for Bridgeoporus (=Oxyporus) nobilissimus (Version 2.0, May 1998)
Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan (Oct. 1999)
Handbook to Additional Fungal Species of Concern in the Northwest Forest plan (Jan. 2003)

Lichens:

Survey Protocols for Component 2 Lichens (Version 2.0, March 1998) Management Recommendations for Survey and Manage Lichens (Version 2.0, March 2, 2000)
Survey Protocols for Survey and Manage Category A & C Lichens in the Northwest Forest Plan Area (Version 2.1 (2003)
2003 Amendment to the Survey Protocol for Survey and Manage Category A & C Lichens. (Version 2.1 Amendment, September 2003)
Survey Protocol Guidance For Conducting Equivalent Effort Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines. (March 2006).
Pseudocyphellaria perpetua Supplemental Guidance for Pre-Disturbance Surveys Under the Northwest Forest Plan Survey and Manage Standard and Guidelines (March 2006).

Bryophytes:

Survey Protocols for Protection Buffer Bryophytes (Version 2.0)

Vascular Plants:

Survey Protocols for Survey and Manage Strategy 2 Vascular Plants (Version 2.0, December 1998).

All species:

Rare, Threatened and Endangered Species of Oregon; Oregon Natural Heritage Information Center (May 2004).

Species	S&M Category	Survey Triggers			Survey Results			Site Management
		Within Range of the Species?	Project Contains Suitable habitat?	Project may negatively affect species/habitat?	Surveys Required?	Survey Completion Date	Sites Known or Found?	
Fungi								
Bridgeoporus nobilissimus	A	Yes	No	No	No[1,7]	N/A	No	No
Lichens								
Bryoria pseudocapillaris	A	No	No	No	No[3]	N/A	No	No
Bryoria spiralifera	A	No	No	No	No[3]	N/A	No	No
Dendriscocaulon intricatulum	A	Yes	Yes	Yes	Yes	10/5/06	No	No
Hypogymnia duplicata	C	Yes	Yes	Yes	Yes[4]	10/5/06	No	No
Leptogium cyanescens	A	Yes	Yes	Yes	Yes	10/5/06	No	No
Lobaria linita var.tenuoir	A	Yes	Yes	Yes	Yes	10/5/06	No	No
Nephroma occultum	C	Yes	Yes	Yes	Yes[4]	10/5/06	No	No
Niebla cephalota	A	No	No	No	No[3]	N/A	No	No
Pseudocyphellaria perpetua	A	No	No	No	No[3]	N/A	No	No
Pseudocyphellaria rainierensis	A	Yes	Yes	Yes	Yes[4]	10/5/06	No	No
Teloschistes flavicans	A	No	No	No	No[2]	N/A	No	No
Bryophytes								
Schistostega pennata	A	Yes	Yes	Yes	Yes[5]	10/5/06	No	No
Tetraphis geniculata	A	Yes	Yes	Yes	Yes[5]	10/5/06	No	No
Vascular Plants								
Botrychium minganense	A	No	No	No	No[7]	N/A	No	No
Botrychium montanum	A	No	No	No	No[7]	N/A	No	No
Coptis asplenifolia	A	No	No	No	No[6]	N/A	No	No
Coptis trifolia	A	No	No	No	No[7]	N/A	No	No
Corydalis aquae-gelidae	A	Yes	Yes	Yes	Yes[4]	10/5/06	No	No
Cypripedium fasciculatum	C	No	No	No	No[7]	N/A	No	No
Cypripediium montanum	C	Yes	Yes	Yes	Yes[7]	10/5/06	No	No
Eucephalis vialis	A	No	No	No	No[7]	N/A	No	No
Galium kamtschaticum	A	No	No	No	No[6]	N/A	No	No
Plantanthera orbiculata var. orbiculata	C	No	No	No	No[6]	N/A	No	No
Category B Species (equivalent effort surveys needed if project area includes old-growth as defined in 2001 ROD glossary, p. 79-80)								
None			Yes	N/A	No[8]	10/5/06	No	

Species	S&M Category	Survey Triggers			Survey Results			Site Management
		Within Range of the Species?	Project Contains Suitable habitat?	Project may negatively affect species/habitat?	Surveys Required?	Survey Completion Date	Sites Known or Found?	
Additional Category B, D, E & F known sites located within the proposed project Area								
None			Yes	N/A	No[8]	10/5/06	No	

1 This species is only associated with large diameter true fir (above 2500' in Oregon). There is no suitable habitat within or adjacent to the project area.
2 This species known range within the NW Forest Plan is along the immediate coast or within the coastal fog zone within sight or sound of the Pacific Ocean. This project is not within the known range.
3 This species is only known from Cape Perpetua on the Oregon coast. This project is not within the known range.
4 This species is known to occur on Bureau of Land Management lands within the Cascades Resource Area.
5 This species is known to occur on Forest Service lands adjacent to the Cascade Resource Area.
6 This species is only known from western Washington. There are no known sites in Oregon.
7 This species is not known to occur on Bureau of Land Management lands within the Salem District.
8 Although surveys are not required for Category B, D, E, and F species, if suitable habitat is present in the proposed project area these species are addressed while conducting required botanical surveys.

SUMMARY OF SURVEY RESULTS : No category A, B, C, D, E or F species were identified during any survey of the proposed **Middle Fork Fire Salvage Timber Sale** area.

STATEMENT OF COMPLIANCE: Pre-disturbance surveys and management of known sites required by protocol standards to comply with the 2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines (as the 2001 ROD was amended or modified as of March 21, 2004) were completed for **Middle Fork Fire Salvage Timber Sale**. The **Middle Fork Fire Salvage Timber Sale** also complies with site management for any Category B, D, and E species as identified in the 2001 ROD (as modified).

Therefore, based on the preceding information (refer to Table A above) regarding the status of surveys and site management for Survey & Manage botanical species, it is my determination that the **Middle Fork Fire Salvage Timber Sale** complies with the provisions of the *2001 Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines* (as the 2001 ROD was amended or modified as of March 21, 2004). For the foregoing reasons, the **Middle Fork Fire Salvage Timber Sale** is in compliance with the 2001 ROD as stated in Point (3) on page 14 of the January 9, 2006, Court order in Northwest Ecosystem Alliance et al. v. Rey et al.

Cindy Enstrom

Cindy Enstrom, Field Manager
Cascade Resource Area
Salem Bureau of Land Management

5/29/2007
Date

X. Response to Comments Received during the EA Comment Period:

The Middle Fork Fire Salvage EA was made available for public review March 14, 2007 to March 30, 2007. A legal notice was placed in the *Albany Democrat Herald* newspaper on March 14, 2007, and posted on the Salem District's website. Three comment letters were received from Oregon Wild, American Forest Resources Council (AFRC), and Karen Sjogren. The concerns raised in the comments have been reviewed and the substantive comments have been summarized. Responses to these comments can be found in the following paragraphs.

1. *The comment period was too short.*

   Response to #1: BLM chose to go with a shorter comment period because only two parties showed interest in the project during scoping, the project is small and no unresolved issues were identified.

2. *There was concern about the retention of standing dead and down wood. Several documents and references were submitted regarding the values of standing dead and down wood.*

   Response to #2: Many of the documents and references did not pertain to the BLM or to the environmental conditions in the Middle Fork Fire Salvage project area. The Middle Fork Fire Salvage project proposes salvage activities on less than 20% of the burned area (BLM land). On more than 80% of the burned area (BLM land), 100% of all standing dead and down woody material would be retained. In addition, snags and down wood will be retained in the proposed salvage areas at levels meeting or exceeding RMP requirements (EA, pp. 5, 6, 8, 10). Because the age of the timber stands is less than 65 years of age and past harvest activities (EA, pp. 15-16), very few large live or dead trees exist in the salvage areas. Any large legacy type trees will be retained.

3. *Since this project is in a CHU, the BLM should follow the fuels for salvage in LSR's.*

   Response to #3: The final draft Recovery Plan for the Northern Spotted Owl (December 1992) recommended the establishment of Designated Conservation Areas (DCAs) on federal lands. In Section III of the Recovery Plan, management guidelines for federal lands are presented. Pages 63 to 81 present the management guidelines for DCAs, which includes the recommendation referred to by Oregon Wild for retaining all snags over 20 inches dbh on page 71. This recommendation applies to DCAs recommended on federal lands in the final draft Recovery Plan. The Middle Fork Fire Salvage project area is not within a DCA recommended by the recovery plan. Outside of the DCAs, it is recommended that federal lands be managed to allow dispersal of owls among DCAs. Management recommendations for these "matrix lands" are presented on pages 81-90 of the Recovery Plan. Also, the middle Fork Fire Salvage project area is not within an LSR according to the NWFP, therefore, LSR guidelines for salvage are not applicable. The project area is in critical habitat, but is located in the Matrix according to both the NWFP and the Recovery Plan. See *DR section VI*.